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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,274	07/17/2006	Klaus Kruckenhauser	1739-0184PUS1	5889

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EXAMINER

PAIK, SANG YEOP

ART UNIT	PAPER NUMBER
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3742

NOTIFICATION DATE	DELIVERY MODE
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10/05/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No. 10/580,274	Applicant(s) KRUCKENHAUSER ET AL.	
	Examiner SANG Y. PAIK	Art Unit 3742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8, 10 and 13-19 is/are allowed.
- 6) ☒ Claim(s) 1-7 and 25 is/are rejected.
- 7) ☒ Claim(s) 9, 11, 12 and 20-24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruckl (US 5,386,097) in view of Beyer et al (US 2003/0197909) or Klein (DE 39 23 829).

Ruckl shows the structure claimed including a laser radiation (4) for printing on a cylinder workpiece (8), a disc (27) which is provided in a region of interaction between the radiation and the workpiece, an interchangeable C-shaped ring (21, 28, 29) with two ends that follow the circumference of the workpiece wherein at one end, the disc is provided and another end with an extraction means (37). But, Ruckl does not show the hood with a vacuum extraction channel.

Beyer shows a hood which covers over an interaction between the radiation and the workpiece wherein a vacuum extraction channel is provided for vacuuming or extracting the interior air of the hood, and Klein also shows that it is known to provide a hood that cover the interaction between the radiation and the workpiece with a vacuum extraction channel to provide the vacuuming of the hood interior therein.

In view of Beyer or Klein, it would have been obvious to one of ordinary skill in the art to adapt Ruckl with the vacuum extraction channel that is provided with a hood in

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place of the disc that would also substantially cover a distance between the two circumferential ends of the C-shaped ring along with the extraction means to allow further extraction of debris resulting from the radiation interaction.

3. Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruckl in view of Beyer or Klein as applied to claims 1, 2 and 25 above, and further in view of Ulrichs (US 2003/0071423).

Ruckl in view of Beyer or Klein shows the structure claimed except for the C-shaped cover ring provided with means for reducing its free inside diameter.

Ulrichs shows that it is known in the art to provide a workpiece holding member with a lamella seal to seals off the holding member by reducing its diameter with respect to the workpiece member.

In view of Ulrichs, it would have been obvious to one of ordinary skill in the art to adapt Ruckl, as modified by Beyer or Klein, with the C-shaped ring with the means such as the lamellar seal to seals off the radiation interaction and allow the debris from the radiation interaction would more effectively vacuumed or extracted to the vacuum extraction source.

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ruckl in view of Beyer or Klein as applied to claims 1, 2 and 25 above, and further in view of Rinaldi (US 5,126,523).

Ruckl in view of Beyer or Klein shows the structure claimed except for the C-shaped cover ring with that is subdivided into at least two ring segments.

Rinaldi shows that it is known in the art to provide a C-shape cover ring with at least two segments that are pivotally held each other.

In view of Rinaldi, it would have been obvious to one of ordinary skill in the art to adapt Ruckl, as modified by Beyer or Klein, with the C-shaped ring with at least two segments to conveniently allow the workpiece to be held by the C-shaped ring segments which allows more flexibility to conform to the workpiece peripheral surface.

Allowable Subject Matter

5. Claims 8, 10, 13-19 and 24 are allowed
6. Claims 9, 11, 12 and 20-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claim.

Response to Arguments

7. Applicant's arguments filed 8/27/10 have been fully considered but they are not persuasive.

With respect to the combination of Ruckl, the combination of the hood structure of Beyer and Klein would provide the hood adjacent the laser 4 and not adjacent to one of the two circumferential ends of the cover ring. This argument is not deemed persuasive since the laser 4 of Ruckl is also near the circumferential ends of the ring that when modify the disc 27 of Ruckl with that of the hood structure, a vacuum extraction with the hood would be at the one end of the C-shaped ring with the extraction means 37 on the other end.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SANG Y. PAIK whose telephone number is (571) 272-4783. The examiner can normally be reached on M-F (9:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tu Hoang can be reached on (571) 272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SANG Y PAIK/

Primary Examiner, Art Unit 3742